# *BRUHAT BANGALORE MAHANAGARA PALIKE*

## PROJECT DIVISION YELAHANKA ZONE

## DETAILED COST ESTIMATE

**Package-05**

**Name of Work : 1. Improvements to road and drains at Ashraya Badavane in Ward No.11**
**2. Improvements to roads and drains at Kuvempunagar 1st and 2nd stage in Ward No.11**
**3. Improvements to roads and drains at Ramachandrapura in Ward No.11**
**4. Improvements to roads and drains at MS Palya in Ward No.11**

| SL NO | DESCRIPTION | AMOUNT IN LAKHS |
|---|---|---|
| 1 | Improvements to road and drains at Ashraya Badavane in Ward No.11 | 4000000 |
| 2 | Improvements to roads and drains at Kuvempunagar 1st and 2nd stage in Ward No.11 | 3000000 |
| 3 | Improvements to roads and drains at Ramachandrapura in Ward No.11 | 3000000 |
| 4 | Improvements to roads and drains at MS Palya in Ward No.11 | 3000000 |
| | **TOTAL AMOUNT** | **13000000** |
| | **Rupees One Crore Thirty Lakh(s) Only** | |

**Certificate.**

1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
2 The provisions made in the estimate are necessary and essential.
3 The workspot was inspected and work is found to be necessary.
4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Assistant Engineer

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore
Asst Executive Engineer
Project Yelahanka Division

Executive Engineer
Yelahanka Division

**Administrative Approval**

**Accorded For .....**
**Head of A/C.....**
**CER NO :..... Dt:..**

**E.E. (Project)**

**Technical Sanction**
**Accorded For** 13000000 lakhs only
**Head of A/C** P3025
**CER NO :** TS/09/18-19 **Dt:** 21/06/18

TA

CE (YNK)

**BRUHAT BANGALORE MAHANAGARA PALIKE**

**Project: 17.Improvement to Roads and Drains at Ashraya Badavane in Ward No.11**

**Est Cost: =40.0Lakh**

| Sl. No. | Description of work | Unit | No. | Length m | Breadth m | Depth m | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Desilt | Cum | | | | | | | |
| | **Ashraya layout** | | | | | | | | |
| | 1st Cross LHS | | 2 | 75.00 | 0.50 | 0.40 | 30.00 | | |
| | 2nd Cross RHS | | 2 | 30.00 | 0.50 | 0.40 | 12.00 | | |
| | 3rd Cross LHS | | 2 | 85.00 | 0.50 | 0.40 | 34.00 | | |
| | 4th Cross | | 2 | 85.00 | 0.50 | 0.40 | 34.00 | | |
| | 5th Cross | | 2 | 85.00 | 0.50 | 0.40 | 34.00 | | |
| | 6th Cross | | 2 | 80.00 | 0.45 | 0.40 | 28.80 | | |
| | Govt School Back side Road | | 2 | 60.00 | 0.45 | 0.40 | 21.60 | | |
| | Cross Road | | 2 | 50.00 | 0.45 | 0.40 | 18.00 | | |
| | | | | | | | **212.40** | 202.92 | **43100.21** |
| | Basic rate | 82.00 | | | | | | | |
| | Loading and unloading with 15km lead= 68+2.50x1.28x15 = 116 | 116.00 | | | | | | | |
| | Sub Total | 198.00 | | | | | | | |
| | Area Weightage 6% | 4.92 | | | | | | | |
| | Final Rate | **202.92** | | | | | | | |
| 2 | Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Ashraya layout | Sqm | | | | | | | |
| | 1st Cross LHS | | 2 | 75.00 | 1.80 | | 270.00 | | |
| | 2nd Cross RHS | | 2 | 30.00 | 1.80 | | 108.00 | | |
| | 3rd Cross LHS | | 2 | 85.00 | 1.80 | | 306.00 | | |
| | 4th Cross | | 2 | 85.00 | 1.80 | | 306.00 | | |
| | 5th Cross | | 2 | 85.00 | 1.80 | | 306.00 | | |
| | 6th Cross | | 2 | 80.00 | 1.80 | | 288.00 | | |
| | Govt School Back side Road | | 2 | 60.00 | 1.80 | | 216.00 | | |
| | Cross Road | | 2 | 50.00 | 1.80 | | 180.00 | | |
| | Consider 40% For R&R | | | | | | 792.00 | | |
| | Consider 30% for Damaged and Missing Slabs | | | | | | -237.60 | | |
| | | | | | | | **554.40** | 80.56 | **44662.46** |
| | Basic rate | 76.00 | | | | | | | |
| | Area Weightage 6% | 4.56 | | | | | | | |
| | Final Rate | **80.56** | | | | | | | |
| | | | | | | | | | |
| 3 | Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Drain | Sqm | | | | | | | |
| | Consider 30% for Damaged and Missing Slabs | | | | | | 237.60 | | |
| | | | | | | | **237.60** | 665.68 | **158165.57** |
| | Basic rate | 628.00 | | | | | | | |
| | Area Weightage 6% | 37.68 | | | | | | | |
| | Final Rate | **665.68** | | | | | | | |
| 4 | KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17) | | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| | **Bed Concrete** | Cum | | | | | | | |
| | Ashraya layout | | | | | | | | |
| | 1st Cross LHS | | 2 | 75.00 | 0.15 | 0.10 | 2.25 | | |
| | 2nd Cross RHS | | 2 | 30.00 | 0.15 | 0.10 | 0.90 | | |
| | 3rd Cross LHS | | 2 | 85.00 | 0.15 | 0.10 | 2.55 | | |
| | 4th Cross | | 2 | 85.00 | 0.15 | 0.10 | 2.55 | | |
| | 5th Cross | | 2 | 85.00 | 0.15 | 0.10 | 2.55 | | |
| | 6th Cross | | 2 | 80.00 | 0.15 | 0.10 | 2.40 | | |
| | Govt School Back side Road | | 2 | 60.00 | 0.15 | 0.10 | 1.80 | | |
| | Cross Road | | 2 | 50.00 | 0.15 | 0.10 | 1.50 | | |
| | | | | | | | | | |
| | Ashraya layout | | | | | | | | |
| | 1st Cross LHS | | 2 | 75.00 | 0.45 | 0.10 | 6.75 | | |
| | 2nd Cross RHS | | 2 | 30.00 | 0.45 | 0.10 | 2.70 | | |
| | 3rd Cross LHS | | 2 | 85.00 | 0.45 | 0.10 | 7.65 | | |
| | 4th Cross | | 2 | 85.00 | 0.45 | 0.10 | 7.65 | | |
| | 5th Cross | | 2 | 85.00 | 0.45 | 0.10 | 7.65 | | |
| | 6th Cross | | 2 | 80.00 | 0.45 | 0.10 | 7.20 | | |
| | Govt School Back side Road | | 2 | 60.00 | 0.45 | 0.10 | 5.40 | | |
| | Cross Road | | 2 | 50.00 | 0.45 | 0.10 | 4.50 | | |
| | | | | | | | **66.00** | 5348.76 | **353018.16** |
| | Basic rate | 5046.00 | | | | | | | |
| | Area Weightage 6% | 302.76 | | | | | | | |
| | Final Rate | **5348.76** | | | | | | | |
| 5 | KSRRB 5-14: Providing and Constructing precast concrete solid blocks with compressive strength not less than 3.5 Newton/sqm with cement mortor 1:4 masonry (quoin, jamb, closer blocks) with solid concrete blocks of size 40X15X20 cms confirming to I.S:2185/1965 in superstructure including cost of materials, labor charges, scaffolding, curing complete as per specifications (P.No.25, I.No.5.26.2 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Flagging Course / Raising of BS Drain | Sqm | | | | | | | |
| | Ashraya layout | | | | | | | | |
| | 1st Cross LHS | | 2.00 | 75.00 | | 0.20 | 30.00 | | |
| | 2nd Cross RHS | | 2.00 | 30.00 | | 0.20 | 12.00 | | |
| | 3rd Cross LHS | | 2.00 | 85.00 | | 0.20 | 34.00 | | |
| | 4th Cross | | 2.00 | 85.00 | | 0.20 | 34.00 | | |
| | 5th Cross | | 2.00 | 85.00 | | 0.20 | 34.00 | | |
| | 6th Cross | | 2.00 | 80.00 | | 0.20 | 32.00 | | |
| | Govt School Back side Road | | 2.00 | 60.00 | | 0.20 | 24.00 | | |
| | Cross Road | | 2.00 | 50.00 | | 0.20 | 20.00 | | |
| | | | | | | | **220.00** | 961.42 | **211512.40** |
| | Basic rate | 907.00 | | | | | | | |
| | Area Weightage 6% | 54.42 | | | | | | | |
| | Final Rate | **961.42** | | | | | | | |
| 6 | KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17) | | | | | | | | |
| | Flagging Course / Raising of BS Drain | Cum | | | | | | | |
| | Ashraya layout | | | | | | | | |
| | 1st Cross LHS | | 2.00 | 75.00 | 0.45 | 0.23 | 15.53 | | |
| | 2nd Cross RHS | | 2.00 | 30.00 | 0.45 | 0.23 | 6.21 | | |
| | 3rd Cross LHS | | 2.00 | 85.00 | 0.45 | 0.23 | 17.60 | | |
| | 4th Cross | | 2.00 | 85.00 | 0.45 | 0.23 | 17.60 | | |
| | 5th Cross | | 2.00 | 85.00 | 0.45 | 0.23 | 17.60 | | |
| | 6th Cross | | 2.00 | 80.00 | 0.45 | 0.23 | 16.56 | | |
| | Govt School Back side Road | | 2.00 | 60.00 | 0.45 | 0.23 | 12.42 | | |
| | Cross Road | | 2.00 | 50.00 | 0.45 | 0.23 | 10.35 | | |
| | | | | | | | **113.85** | 4438.22 | **505291.35** |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| | Basic rate | 4187.00 | | | | | | | |
| | Area Weightage 6% | 251.22 | | | | | | | |
| | Final Rate | **4438.22** | | | | | | | |
| 7 | KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17) | | | | | | | | |
| | Ashraya layout | Sqm | | | | | | | |
| | 1st Cross LHS | | 2 | 75.00 | | 0.23 | 34.50 | | |
| | 2nd Cross RHS | | 2 | 30.00 | | 0.23 | 13.80 | | |
| | 3rd Cross LHS | | 2 | 85.00 | | 0.23 | 39.10 | | |
| | 4th Cross | | 2 | 85.00 | | 0.23 | 39.10 | | |
| | 5th Cross | | 2 | 85.00 | | 0.23 | 39.10 | | |
| | 6th Cross | | 2 | 80.00 | | 0.23 | 36.80 | | |
| | Govt School Back side Road | | 2 | 60.00 | | 0.23 | 27.60 | | |
| | Cross Road | | 2 | 50.00 | | 0.23 | 23.00 | | |
| | | | | | | | **253.00** | 102.82 | **26013.46** |
| | Basic rate | 97.00 | | | | | | | |
| | Area Weightage 6% | 5.82 | | | | | | | |
| | Final Rate | **102.82** | | | | | | | |
| 8 | KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | **Coping** | Cum | | | | | | | |
| | Ashraya layout | | | | | | | | |
| | 1st Cross LHS | | 2.00 | 75.00 | 0.15 | 0.075 | 1.69 | | |
| | 2nd Cross RHS | | 2.00 | 30.00 | 0.15 | 0.075 | 0.68 | | |
| | 3rd Cross LHS | | 2.00 | 85.00 | 0.15 | 0.075 | 1.91 | | |
| | 4th Cross | | 2.00 | 85.00 | 0.15 | 0.075 | 1.91 | | |
| | 5th Cross | | 2.00 | 85.00 | 0.15 | 0.075 | 1.91 | | |
| | 6th Cross | | 2.00 | 80.00 | 0.15 | 0.075 | 1.80 | | |
| | Govt School Back side Road | | 2.00 | 60.00 | 0.15 | 0.075 | 1.35 | | |
| | Cross Road | | 2.00 | 50.00 | 0.15 | 0.075 | 1.13 | | |
| | | | | | | | | | |
| | Ashraya layout | | | | | | | | |
| | 1st Cross LHS | | 2.00 | 75.00 | 0.45 | 0.075 | 5.06 | | |
| | 2nd Cross RHS | | 2.00 | 30.00 | 0.45 | 0.075 | 2.03 | | |
| | 3rd Cross LHS | | 2.00 | 85.00 | 0.45 | 0.075 | 5.74 | | |
| | 4th Cross | | 2.00 | 85.00 | 0.45 | 0.075 | 5.74 | | |
| | 5th Cross | | 2.00 | 85.00 | 0.45 | 0.075 | 5.74 | | |
| | 6th Cross | | 2.00 | 80.00 | 0.45 | 0.075 | 5.40 | | |
| | Govt School Back side Road | | 2.00 | 60.00 | 0.45 | 0.075 | 4.05 | | |
| | Cross Road | | 2.00 | 50.00 | 0.45 | 0.075 | 3.38 | | |
| | | | | | | | **49.50** | 5767.46 | **285489.27** |
| | Basic rate | 5441.00 | | | | | | | |
| | Area Weightage 6% | 326.46 | | | | | | | |
| | Final Rate | **5767.46** | | | | | | | |
| 9 | Providing and fixing **RCC Precast cover slab of 100mm thick** for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) | | | | | | | | |
| | Cover Slab | Sqm | | | | | | | |
| | Ashraya layout | | | | | | | | |
| | 1st Cross LHS | | 2 | 75.00 | 1.20 | | 180.00 | | |
| | 2nd Cross RHS | | 2 | 30.00 | 1.20 | | 72.00 | | |
| | 3rd Cross LHS | | 2 | 85.00 | 1.20 | | 204.00 | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| | 4th Cross | | 2 | 85.00 | 1.20 | | 204.00 | | |
| | 5th Cross | | 2 | 85.00 | 1.20 | | 204.00 | | |
| | 6th Cross | | 2 | 80.00 | 1.20 | | 192.00 | | |
| | Govt School Back side Road | | 2 | 60.00 | 1.20 | | 144.00 | | |
| | Cross Road | | 2 | 50.00 | 1.20 | | 120.00 | | |
| | | | | | | | **1320.00** | 1738.00 | **2294160.00** |
| | Data rate | 1738.00 | | | | | | | |
| | | | | | | | | **Total Construction Cost** | **3921412.875** |
| 10 | | | | | | | | **Cost towards PMC / Third Party inspection LS** | **78429.00** |
| | | | | | | | | **Sub Total** | **3999841.88** |
| 11 | | | | | | | | **Miscellaneous and rounding off** | **158.13** |
| | | | | | | | | **Total** | **4000000.00** |

**Certificate.**

1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
2 The provisions made in the estimate are necessary and essential.
3 The workspot was inspected and work is found to be necessary.
4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer | Assistant Executive Engineer 16/5/2018 | Executive Engineer 18/5/18

**BRUHAT BANGALORE MAHANAGARA PALIKE**

**Project: 18.Improvement to Roads and Drains at Kuvempunagar 1st and 2nd stage in Ward No.11**

**Est Cost: =30.0Lakh**

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 1 | KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Desilt | Cum | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2 | 73.00 | 0.50 | 0.40 | 29.20 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2 | 250.00 | 0.50 | 0.40 | 100.00 | | |
| | **Kuvempunagara 1st stage** | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2 | 140.00 | 0.50 | 0.40 | 56.00 | | |
| | Cross Road | | 2 | 55.00 | 0.50 | 0.40 | 22.00 | | |
| | | | | | | | **207.20** | 202.92 | **42045.02** |
| | Basic rate | 82.00 | | | | | | | |
| | Loading and unloading with 15km lead= 68+2.50x1.28x15 = 116 | 116.00 | | | | | | | |
| | Sub Total | 198.00 | | | | | | | |
| | Area Weightage 6% | 4.92 | | | | | | | |
| | Final Rate | **202.92** | | | | | | | |
| 2 | Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Kuvempunagar Main Road | Sqm | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2.00 | 73.00 | 1.80 | | 262.80 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2.00 | 250.00 | 1.80 | | 900.00 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2.00 | 140.00 | 1.80 | | 504.00 | | |
| | Cross Road | | 2.00 | 55.00 | 1.80 | | 198.00 | | |
| | Consider 30% For R&R | | | | | | 559.44 | | |
| | Consider 20% for Damaged and Missing Slabs | | | | | | -111.89 | | |
| | | | | | | | **447.55** | 80.56 | **36054.79** |
| | Basic rate | 76.00 | | | | | | | |
| | Area Weightage 6% | 4.56 | | | | | | | |
| | Final Rate | **80.56** | | | | | | | |
| 3 | Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Drain | Sqm | | | | | | | |
| | Consider 20% for Damaged and Missing Slabs | | | | | | 111.89 | | |
| | | | | | | | **111.89** | 665.68 | **74481.60** |
| | Basic rate | 628.00 | | | | | | | |
| | Area Weightage 6% | 37.68 | | | | | | | |
| | Final Rate | **665.68** | | | | | | | |
| 4 | KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | **Bed Concrete** | Cum | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2 | 73.00 | 0.15 | 0.10 | 2.19 | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2 | 250.00 | 0.15 | 0.10 | 7.50 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2 | 140.00 | 0.15 | 0.10 | 4.20 | | |
| | Cross Road | | 2 | 55.00 | 0.15 | 0.10 | 1.65 | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2 | 73.00 | 0.45 | 0.10 | 6.57 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2 | 250.00 | 0.45 | 0.10 | 22.50 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2 | 140.00 | 0.45 | 0.10 | 12.60 | | |
| | Cross Road | | 2 | 55.00 | 0.45 | 0.10 | 4.95 | | |
| | | | | | | | **62.16** | 5348.76 | **332478.92** |
| | Basic rate | 5046.00 | | | | | | | |
| | Area Weightage 6% | 302.76 | | | | | | | |
| | Final Rate | **5348.76** | | | | | | | |
| 5 | KSRRB 5-14: Providing and Constructing precast concrete solid blocks with compressive strength not less than 3.5 Newton/sqm with cement mortor 1:4 masonry (quoin, jamb, closer blocks) with solid concrete blocks of size 40X15X20 cms confirming to I.S:2185/1965 in superstructure including cost of materials, labor charges, scaffolding, curing complete as per specifications (P.No.25, I.No.5.26.2 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Flagging Course / Raising of BS Drain | Sqm | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2.00 | 73.00 | | 0.20 | 29.20 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2.00 | 250.00 | | 0.20 | 100.00 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2.00 | 140.00 | | 0.20 | 56.00 | | |
| | Cross Road | | 2.00 | 55.00 | | 0.20 | 22.00 | | |
| | | | | | | | **207.20** | 961.42 | **199206.22** |
| | Basic rate | 907.00 | | | | | | | |
| | Area Weightage 6% | 54.42 | | | | | | | |
| | Final Rate | **961.42** | | | | | | | |
| 6 | KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17) | | | | | | | | |
| | Flagging Course / Raising of BS Drain | Cum | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2.00 | 122.00 | 0.45 | 0.23 | 25.25 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2.00 | 250.00 | 0.45 | 0.23 | 51.75 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2.00 | 140.00 | 0.45 | 0.23 | 28.98 | | |
| | Cross Road | | 2.00 | 55.00 | 0.45 | 0.23 | 11.39 | | |
| | | | | | | | **117.37** | 4438.22 | **520909.44** |
| | Basic rate | 4187.00 | | | | | | | |
| | Area Weightage 6% | 251.22 | | | | | | | |
| | Final Rate | **4438.22** | | | | | | | |
| 7 | KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17) | | | | | | | | |
| | Kuvempunagar Main Road | Sqm | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2 | 122 | | 0.23 | 56.12 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2 | 250 | | 0.23 | 115.00 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2 | 140 | | 0.23 | 64.40 | | |
| | Cross Road | | 2 | 55 | | 0.23 | 25.30 | | |
| | | | | | | | **260.82** | 102.82 | **26817.51** |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| | Basic rate | 97.00 | | | | | | | |
| | Area Weightage 6% | 5.82 | | | | | | | |
| | Final Rate | **102.82** | | | | | | | |
| 8 | KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | **Coping** | Cum | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2.00 | 73.00 | 0.15 | 0.075 | 1.64 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2.00 | 250.00 | 0.15 | 0.075 | 5.63 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2.00 | 140.00 | 0.15 | 0.075 | 3.15 | | |
| | Cross Road | | 2.00 | 55.00 | 0.15 | 0.075 | 1.24 | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2.00 | 122.00 | 0.45 | 0.075 | 8.24 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2.00 | 250.00 | 0.45 | 0.075 | 16.88 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2.00 | 140.00 | 0.45 | 0.075 | 9.45 | | |
| | Cross Road | | 2.00 | 55.00 | 0.45 | 0.075 | 3.71 | | |
| | Basic rate | 5441.00 | | | | | **49.93** | 5767.46 | **287954.86** |
| | Area Weightage 6% | 326.46 | | | | | | | |
| | Final Rate | **5767.46** | | | | | | | |
| 9 | Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Cover | Sqm | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2.00 | 73.00 | 1.20 | | 175.20 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2.00 | 250.00 | 1.20 | | 600.00 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2.00 | 140.00 | 1.20 | | 336.00 | | |
| | Cross Road | | 2.00 | 55.00 | 1.20 | | 132.00 | | |
| | Basic rate | 779.00 | | | | | **1243.20** | 825.74 | **1026559.97** |
| | Area Weightage 6% | 46.74 | | | | | | | |
| | Final Rate | **825.74** | | | | | | | |
| 10 | KSRB 5-9 : Providing chamfering edges to stone slab 2.5 cms. wide as per specifications. (only chamfered length shall be recorded) KBS 5.1.13 (P.No.24, I.No.5.22 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Cover | m | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 2.00 | 122.00 | | 3.60 | 878.40 | | |
| | 1st Main Road (Ganesh Temple to Naidu Lyt) | | 2.00 | 417.00 | | 3.60 | 3002.40 | | |
| | Kuvempunagara 1st stage | | | | | | | | |
| | Ganapathi Temple Parallel Road | | 2.00 | 233.00 | | 3.60 | 1677.60 | | |
| | Cross Road | | 2.00 | 92.00 | | 3.60 | 662.40 | | |
| | Basic rate | 35.00 | | | | | **6220.80** | 37.10 | **230791.68** |
| | Area Weightage 6% | 2.10 | | | | | | | |
| | Final Rate | **37.10** | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 11 | KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17) | | | | | | | | |
| | Kuvempunagar Main Road | Sqm | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 1.00 | 90.00 | 5.00 | -- | 450.00 | | |
| | | | | | | | **450.00** | 3.18 | **1431.00** |
| | Basic rate | 3.00 | | | | | | | |
| | Area Weightage 6% | 0.18 | | | | | | | |
| | Final Rate | **3.18** | | | | | | | |
| 12 | KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17) | | | | | | | | |
| | | Sqm | | | | | | | |
| | **For Laying BC** | | | | | | | | |
| | Kuvempunagar Main Road | | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 1.00 | 90.00 | 5.00 | -- | 450.00 | | |
| | | | | | | | **450.00** | 12.72 | **5724.00** |
| | Basic rate | 12.00 | | | | | | | |
| | Area Weightage 6% | 0.72 | | | | | | | |
| | Final Rate | **12.72** | | | | | | | |
| 13 | KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | Kuvempunagar Main Road | Cum | | | | | | | |
| | 6th Cross (Kuvempunagar Main Road) | | 1 | 90.00 | 5.00 | 0.04 | 18.00 | | |
| | | | | | | | **18.00** | 8118.54 | **146133.72** |
| | Basic rate | 7659.00 | | | | | | | |
| | Area Weightage 6% | 459.54 | | | | | | | |
| | Final Rate | **8118.54** | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 14 | KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17) | | | | | | | | |
| | Edge line | Sqm | 2 | 90.00 | 0.10 | -- | 18.00 | | |
| | | | | | | | **18.00** | 542.72 | **9768.96** |
| | Basic rate | 512.00 | | | | | | | |
| | Area Weightage 6% | 30.72 | | | | | | | |
| | Final Rate | **542.72** | | | | | | | |
| | | | | | | | **Total Construction Cost** | | **2940357.701** |
| 15 | | | | **Cost towards PMC / Third Party inspection LS** | | | | | **58808.00** |
| | | | | | | | | **Sub Total** | **2999165.70** |
| 16 | | | | | | | **Miscellaneous and rounding off** | | **834.30** |
| | | | | | | | | **Total** | **3000000.00** |

**Certificate.**

1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
2 The provisions made in the estimate are necessary and essential.
3 The workspot was inspected and work is found to be necessary.
4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer | Assistant Executive Engineer 16/5/2018 | Executive Engineer 18/6/18

**BRUHAT BANGALORE MAHANAGARA PALIKE**

**Project: 19.Improvement to Roads and Drains at Ramachandrapura in Ward No.11**

**Est Cost: =30.0Lakh**

| Sl. No. | Description of work | Unit | No. | Length m | Breadth m | Depth m | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| 1 | KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Desilt | Cum | | | | | | | |
| | Cross Road 1 | | 2 | 50.00 | 0.50 | 0.50 | 25.00 | | |
| | Cross Road 2 | | 2 | 32.00 | 0.50 | 0.50 | 16.00 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2 | 45.00 | 0.40 | 0.50 | 18.00 | | |
| | 5th Cross LHS | | 2 | 45.00 | 0.45 | 0.50 | 20.25 | | |
| | 6th Cross LHS | | 2 | 40.00 | 0.50 | 0.50 | 20.00 | | |
| | 2nd Cross RHS | | 2 | 55.00 | 0.50 | 0.50 | 27.50 | | |
| | 3rd Cross RHS | | 2 | 45.00 | 0.50 | 0.50 | 22.50 | | |
| | Right Cross Road Opp to Ramachandrapura Bus Stop | | 2 | 145.00 | 0.60 | 0.60 | 104.40 | | |
| | | | | | | | **253.65** | 202.92 | **51470.66** |
| | Basic rate | 82.00 | | | | | | | |
| | Loading and unloading with 15km lead= 68+2.50x1.28x15 = 116 | 116.00 | | | | | | | |
| | Sub Total | 198.00 | | | | | | | |
| | Area Weightage 6% | 4.92 | | | | | | | |
| | Final Rate | **202.92** | | | | | | | |
| 2 | Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | | Sqm | | | | | | | |
| | Cross Road 1 | | 2 | 50.00 | 1.80 | | 180.00 | | |
| | Cross Road 2 | | 2 | 32.00 | 1.80 | | 115.20 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2 | 45.00 | 1.80 | | 162.00 | | |
| | 5th Cross LHS | | 2 | 45.00 | 1.80 | | 162.00 | | |
| | 6th Cross LHS | | 2 | 40.00 | 1.80 | | 144.00 | | |
| | 2nd Cross RHS | | 2 | 55.00 | 1.80 | | 198.00 | | |
| | 3rd Cross RHS | | 2 | 45.00 | 1.80 | | 162.00 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2 | 145.00 | 1.80 | | 522.00 | | |
| | | | | | | | | | |
| | Consider 30% For R&R | | | | | | 493.56 | | |
| | Consider 20% for Damaged and Missing Slabs | | | | | | -98.71 | | |
| | | | | | | | **394.85** | 80.56 | **31808.95** |
| | Basic rate | 76.00 | | | | | | | |
| | Area Weightage 6% | 4.56 | | | | | | | |
| | Final Rate | **80.56** | | | | | | | |
| 3 | Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Drain | Sqm | | | | | | | |
| | Consider 20% for Damaged and Missing Slabs | | | | | | 98.71 | | |
| | | | | | | | **98.71** | 665.68 | **65710.60** |
| | Basic rate | 628.00 | | | | | | | |
| | Area Weightage 6% | 37.68 | | | | | | | |
| | Final Rate | **665.68** | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 4 | KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | **Bed Concrete** | Cum | | | | | | | |
| | Cross Road 1 | | 2 | 50.00 | 0.15 | 0.10 | 1.50 | | |
| | Cross Road 2 | | 2 | 32.00 | 0.15 | 0.10 | 0.96 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2 | 45.00 | 0.15 | 0.10 | 1.35 | | |
| | 5th Cross LHS | | 2 | 45.00 | 0.15 | 0.10 | 1.35 | | |
| | 6th Cross LHS | | 2 | 40.00 | 0.15 | 0.10 | 1.20 | | |
| | 2nd Cross RHS | | 2 | 55.00 | 0.15 | 0.10 | 1.65 | | |
| | 3rd Cross RHS | | 2 | 45.00 | 0.15 | 0.10 | 1.35 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2 | 145.00 | 0.15 | 0.10 | 4.35 | | |
| | | | | | | | | | |
| | Cross Road 1 | | 2 | 50.00 | 0.45 | 0.10 | 4.50 | | |
| | Cross Road 2 | | 2 | 32.00 | 0.45 | 0.10 | 2.88 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2 | 45.00 | 0.45 | 0.10 | 4.05 | | |
| | 5th Cross LHS | | 2 | 45.00 | 0.45 | 0.10 | 4.05 | | |
| | 6th Cross LHS | | 2 | 40.00 | 0.45 | 0.10 | 3.60 | | |
| | 2nd Cross RHS | | 2 | 55.00 | 0.45 | 0.10 | 4.95 | | |
| | 3rd Cross RHS | | 2 | 45.00 | 0.45 | 0.10 | 4.05 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2 | 145.00 | 0.45 | 0.10 | 13.05 | | |
| | | | | | | | | | |
| | | | | | | | **54.84** | 5348.76 | **293326.00** |
| | Basic rate | 5046.00 | | | | | | | |
| | Area Weightage 6% | 302.76 | | | | | | | |
| | Final Rate | **5348.76** | | | | | | | |
| 5 | KSRRB 5-14: Providing and Constructing precast concrete solid blocks with compressive strength not less than 3.5 Newton/sqm with cement mortor 1:4 masonry (quoin, jamb, closer blocks) with solid concrete blocks of size 40X15X20 cms confirming to I.S:2185/1965 in superstructure including cost of materials, labor charges, scaffolding, curing complete as per specifications (P.No.25, I.No.5.26.2 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Flagging Course / Raising of BS Drain | Sqm | | | | | | | |
| | Cross Road 1 | | 2.00 | 50.00 | | 0.20 | 20.00 | | |
| | Cross Road 2 | | 2.00 | 32.00 | | 0.20 | 12.80 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2.00 | 45.00 | | 0.20 | 18.00 | | |
| | 5th Cross LHS | | 2.00 | 45.00 | | 0.20 | 18.00 | | |
| | 6th Cross LHS | | 2.00 | 40.00 | | 0.20 | 16.00 | | |
| | 2nd Cross RHS | | 2.00 | 55.00 | | 0.20 | 22.00 | | |
| | 3rd Cross RHS | | 2.00 | 45.00 | | 0.20 | 18.00 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2.00 | 145.00 | | 0.20 | 58.00 | | |
| | | | | | | | | | |
| | | | | | | | **182.80** | 961.42 | **175747.58** |
| | Basic rate | 907.00 | | | | | | | |
| | Area Weightage 6% | 54.42 | | | | | | | |
| | Final Rate | **961.42** | | | | | | | |
| 6 | KSRB 5.2-3: Providing and constructing granite size stone masonry in foundation cement mortor 1:6, stone hammered dressed in courses not less than 20cms high, bond stones at 2m. apart in each course including cost of materaials, labour, curing complete as per specifications. Specifcation No. KBS 5.1.13. (P.No.23, I.No.5.6 of PW, P&IWTD S.R 2016-17) | | | | | | | | |
| | Flagging Course / Raising of BS Drain | Cum | | | | | | | |
| | Cross Road 1 | | 2.00 | 50.00 | 0.45 | 0.23 | 10.35 | | |
| | Cross Road 2 | | 2.00 | 32.00 | 0.45 | 0.23 | 6.62 | | |
| | Mariyamma Block | | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| | 1st Cross RHS | | 2.00 | 45.00 | 0.45 | 0.23 | 9.32 | | |
| | 5th Cross LHS | | 2.00 | 45.00 | 0.45 | 0.23 | 9.32 | | |
| | 6th Cross LHS | | 2.00 | 40.00 | 0.45 | 0.23 | 8.28 | | |
| | 2nd Cross RHS | | 2.00 | 55.00 | 0.45 | 0.23 | 11.39 | | |
| | 3rd Cross RHS | | 2.00 | 45.00 | 0.45 | 0.23 | 9.32 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2.00 | 145.00 | 0.45 | 0.23 | 30.02 | | |
| | | | | | | | | | |
| | Basic rate | 4187.00 | | | | | **35.60** | 4438.22 | **158018.38** |
| | Area Weightage 6% | 251.22 | | | | | | | |
| | Final Rate | **4438.22** | | | | | | | |
| 7 | KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.No.113, I.No.15.1 of PW, P&IWTD S.R 2016-17) | | | | | | | | |
| | | Sqm | | | | | | | |
| | Cross Road 1 | | 2.00 | 50.00 | | 0.23 | 23.00 | | |
| | Cross Road 2 | | 2.00 | 32.00 | | 0.23 | 14.72 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2.00 | 45.00 | | 0.23 | 20.70 | | |
| | 5th Cross LHS | | 2.00 | 45.00 | | 0.23 | 20.70 | | |
| | 6th Cross LHS | | 2.00 | 40.00 | | 0.23 | 18.40 | | |
| | 2nd Cross RHS | | 2.00 | 55.00 | | 0.23 | 25.30 | | |
| | 3rd Cross RHS | | 2.00 | 45.00 | | 0.23 | 20.70 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2.00 | 145.00 | | 0.23 | 66.70 | | |
| | | | | | | | **210.22** | 102.82 | **21614.82** |
| | Basic rate | 97.00 | | | | | | | |
| | Area Weightage 6% | 5.82 | | | | | | | |
| | Final Rate | **102.82** | | | | | | | |
| 8 | KSRB 4-1.6: Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.6 of PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | **Coping** | Cum | | | | | | | |
| | Cross Road 1 | | 2.00 | 50.00 | 0.15 | 0.075 | 1.13 | | |
| | Cross Road 2 | | 2.00 | 32.00 | 0.15 | 0.075 | 0.72 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2.00 | 45.00 | 0.15 | 0.075 | 1.01 | | |
| | 5th Cross LHS | | 2.00 | 45.00 | 0.15 | 0.075 | 1.01 | | |
| | 6th Cross LHS | | 2.00 | 40.00 | 0.15 | 0.075 | 0.90 | | |
| | 2nd Cross RHS | | 2.00 | 55.00 | 0.15 | 0.075 | 1.24 | | |
| | 3rd Cross RHS | | 2.00 | 45.00 | 0.15 | 0.075 | 1.01 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2.00 | 145.00 | 0.15 | 0.075 | 3.26 | | |
| | | | | | | | | | |
| | Cross Road 1 | | 2.00 | 50.00 | 0.45 | 0.075 | 3.38 | | |
| | Cross Road 2 | | 2.00 | 32.00 | 0.45 | 0.075 | 2.16 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2.00 | 45.00 | 0.45 | 0.075 | 3.04 | | |
| | 5th Cross LHS | | 2.00 | 45.00 | 0.45 | 0.075 | 3.04 | | |
| | 6th Cross LHS | | 2.00 | 40.00 | 0.45 | 0.075 | 2.70 | | |
| | 2nd Cross RHS | | 2.00 | 55.00 | 0.45 | 0.075 | 3.71 | | |
| | 3rd Cross RHS | | 2.00 | 45.00 | 0.45 | 0.075 | 3.04 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2.00 | 145.00 | 0.45 | 0.075 | 9.79 | | |
| | | | | | | | **41.13** | 5767.46 | **237215.63** |
| | Basic rate | 5441.00 | | | | | | | |
| | Area Weightage 6% | 326.46 | | | | | | | |
| | Final Rate | **5767.46** | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 9 | Providing and fixing RCC Precast cover slab of 100mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge. (Data Rate) | | | | | | | | |
| | Cover Slab | Sqm | | | | | | | |
| | Cross Road 1 | | 2.00 | 50.00 | 1.20 | | 120.00 | | |
| | Cross Road 2 | | 2.00 | 32.00 | 1.20 | | 76.80 | | |
| | Mariyamma Block | | | | | | | | |
| | 1st Cross RHS | | 2.00 | 45.00 | 1.20 | | 108.00 | | |
| | 5th Cross LHS | | 2.00 | 45.00 | 1.20 | | 108.00 | | |
| | 6th Cross LHS | | 2.00 | 40.00 | 1.20 | | 96.00 | | |
| | 2nd Cross RHS | | 2.00 | 55.00 | 1.20 | | 132.00 | | |
| | 3rd Cross RHS | | 2.00 | 45.00 | 1.20 | | 108.00 | | |
| | Right Cross Road Opp to Ramachandrapura Bus S | | 2.00 | 145.00 | 1.20 | | 348.00 | | |
| | Data rate | 1738.00 | | | | | **1096.80** | 1738.00 | **1906238.40** |
| 10 | | | | | | | | **Total Construction Cost** | **2941151.025** |
| 11 | | | | | | | | **Cost towards PMC / Third Party inspection LS** | **58824.00** |
| | | | | | | | | **Sub Total** | **2999975.03** |
| | | | | | | | | **Miscellaneous and rounding off** | **24.97** |
| | | | | | | | | **Total** | **3000000.00** |

**Certificate.**

1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
2 The provisions made in the estimate are necessary and essential.
3 The workspot was inspected and work is found to be necessary.
4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer 12/6/2017

Executive Engineer 18/6/18

## BRUHAT BANGALORE MAHANAGARA PALIKE

### Project:20. Improvement to Roads and Drains at M S Paly in Ward No.11

Est Cost: =30.0La

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 1 | KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.142, I.No.19.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Desilt | Cum | | | | | | | |
| | M S Palya | | | | | | | | |
| | 2nd cross Road | | | | | | | | |
| | 3rd Cross road | | 2 | 120.00 | 0.50 | 0.40 | 48.00 | | |
| | | | 2 | 135.00 | 0.50 | 0.40 | 54.00 | | |
| | Mubarak Road | | | | | | | | |
| | Ch 0-30 | | | | | | | | |
| | Ch 30-76 | | 2 | 30.00 | 1.00 | 0.85 | 51.00 | | |
| | Ch 76-137 | | 2 | 46.00 | 1.00 | 0.85 | 78.20 | | |
| | Ch 137-260 | | 2 | 61.00 | 0.50 | 0.40 | 24.40 | | |
| | Ch 260-350 | | 2 | 123.00 | 1.00 | 0.85 | 209.10 | | |
| | | | 2 | 90.00 | 1.00 | 0.85 | 153.00 | | |
| | Basic rate | 82.00 | | | | | **617.70** | 202.92 | 125343.68 |
| | Loading and unloading with 15km lead= 68+2.50x1.28x15 = 116 | 116.00 | | | | | | | |
| | Sub Total | 198.00 | | | | | | | |
| | Area Weightage 6% | 4.92 | | | | | | | |
| | Final Rate | **202.92** | | | | | | | |
| 2 | Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25, I.No.5.33 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | M S Palya | Sqm | | | | | | | |
| | 2nd cross Road | | | | | | | | |
| | 3rd Cross road | | 2 | 120.00 | 1.80 | | 432.00 | | |
| | Consider 20% For R&R | | 2 | 135.00 | 1.80 | | 486.00 | | |
| | Consider 20% for Damaged and Missing Slabs | | | | | | 183.60 | | |
| | | | | | | | -36.72 | | |
| | **Cover Slab** | | | | | | | | |
| | 2nd cross Road | | | | | | - | | |
| | 3rd Cross road | | 2 | 54.00 | 1.20 | | 129.60 | | |
| | Consider For R&R | | 2 | 60.75 | 1.20 | | 145.80 | | |
| | Consider 20% for Damaged and Missing Slabs | | | | | | 275.40 | | |
| | | | | | | | -55.08 | | |
| | Basic rate | 76.00 | | | | | **367.20** | 80.56 | 29581.63 |
| | Area Weightage 6% | 4.56 | | | | | | | |
| | Final Rate | **80.56** | | | | | | | |
| 3 | Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 7.5cms thick (P.No.25, I.No.5.31.1 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Drain | Sqm | | | | | | | |
| | Consider 20% for Damaged and Missing Slabs | | | | | | 36.72 | | |
| | Basic rate | 628.00 | | | | | **36.72** | 665.68 | 24443.77 |
| | Area Weightage 6% | 37.68 | | | | | | | |
| | Final Rate | **665.68** | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 4 | Providing granite Slabs of Selected quality roughly dressed and fixed in cement mortor (1:6) including fixing curing etc,. Complete. 10cms thick (P.No.25, I.No.5.31.2 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Cover | Sqm | | | | | | | |
| | For BS Slab Drain | | | | | | | | |
| | | | | | | | 55.08 | | |
| | Basic rate | 779.00 | | | | | **55.08** | 825.74 | **45481.76** |
| | Area Weightage 6% | 46.74 | | | | | | | |
| | Final Rate | **825.74** | | | | | | | |
| 5 | KSRB 5-9 : Providing chamfering edges to stone slab 2.5 cms. wide as per specifications. (only chamfered length shall be recorded) KBS 5.1.13 (P.No.24, I.No.5.22 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | For BS Slab Cover | m | | | | | | | |
| | For BS Slab Drain | | 1.00 | 46.00 | | 3.60 | 165.60 | | |
| | Basic rate | 35.00 | | | | | **165.60** | 37.10 | **6143.76** |
| | Area Weightage 6% | 2.10 | | | | | | | |
| | Final Rate | **37.10** | | | | | | | |
| 6 | KSRB 4-1.2: Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No.12, I.No.4.2 of PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | Mubarak Road | Cum | | | | | | | |
| | Ch 0-30 | | 2.00 | 30.00 | 1.00 | 0.10 | 6.00 | | |
| | Ch 30-76 | | 2.00 | 46.00 | 1.00 | 0.10 | 9.20 | | |
| | Ch 137-260 | | 2.00 | 123.00 | 1.00 | 0.10 | 24.60 | | |
| | Ch 260-350 | | 2.00 | 90.00 | 1.00 | 0.10 | 18.00 | | |
| | Basic rate | 5046.00 | | | | | **57.80** | 5348.76 | **309158.33** |
| | Area Weightage 6% | 302.76 | | | | | | | |
| | Final Rate | **5348.76** | | | | | | | |
| 7 | Providing laying plain/ reinforced cement concrete M20 Grade for Box Drain walls of thickness 10cm to 20cm including centering shuttering for work etc. complete as per approved drawing and design MORTH specification No. 1500, 1700, 2200. (P.No.265, I.No.37.59.2 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | **Bottom Raft** | Cum | | | | | | | |
| | **Mubarak Road** | | | | | | | | |
| | Ch 0-30 | | 2.00 | 30.00 | 0.80 | 0.15 | 7.20 | | |
| | Ch 30-76 | | 2.00 | 46.00 | 0.80 | 0.15 | 11.04 | | |
| | Ch 137-260 | | 2.00 | 123.00 | 0.80 | 0.15 | 29.52 | | |
| | Ch 260-350 | | 2.00 | 90.00 | 0.80 | 0.15 | 21.60 | | |
| | **Walls** | | | | | | | | |
| | Mubarak Road | | | | | | | | |
| | Ch 0-30 | | 4.00 | 30.00 | 0.10 | 0.60 | 7.20 | | |
| | Ch 30-76 | | 4.00 | 46.00 | 0.10 | 0.60 | 11.04 | | |
| | Ch 137-260 | | 4.00 | 123.00 | 0.10 | 0.60 | 29.52 | | |
| | Ch 260-350 | | 4.00 | 90.00 | 0.10 | 0.60 | 21.60 | | |
| | Basic rate | 10408.00 | | | | | **138.72** | 11032.48 | **1530425.63** |
| | Area Weightage 6% | 624.48 | | | | | | | |
| | Final Rate | **11032.48** | | | | | | | |

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 8 | KSRB - 4.9.2: Providing TMT steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, palcing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining memebrs wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3. (P.No.17, I.No.4.46.3 of PW, P&IWTD SR 2016-17) | | | | | | | | |
| | Consider 50Kgs/cum for Drain | Tonne | | 138.72 | 0.050 | -- | 6.94 | | |
| | | | | | | | **6.94** | 64243.42 | **445849.33** |
| | Basic rate | 60607.00 | | | | | | | |
| | Area Weightage 6% | 3636.42 | | | | | | | |
| | Final Rate | **64243.42** | | | | | | | |
| 9 | KSRRB 500-2: Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatement including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH Spec, Chapter 5 (P.No.161, I.No.21.2 of PW,P&IWTD SR 2016-17) | | | | | | | | |
| | M S Palya | Sqm | | | | | | | |
| | 2nd cross Road | | 1.00 | 120.00 | 4.70 | -- | 564.00 | | |
| | 3rd Cross road | | 1.00 | 135.00 | 4.40 | -- | 594.00 | | |
| | | | | | | | **1158.00** | 3.18 | **3682.44** |
| | Basic rate | 3.00 | | | | | | | |
| | Area Weightage 6% | 0.18 | | | | | | | |
| | Final Rate | **3.18** | | | | | | | |
| 10 | KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17) | | | | | | | | |
| | For Laying BC | Sqm | | | | | | | |
| | 2nd cross Road | | 1.00 | 120.00 | 4.70 | -- | 564.00 | | |
| | 3rd Cross road | | 1.00 | 135.00 | 4.40 | -- | 594.00 | | |
| | | | | | | | **1158.00** | 12.72 | **14729.76** |
| | Basic rate | 12.00 | | | | | | | |
| | Area Weightage 6% | 0.72 | | | | | | | |
| | Final Rate | **12.72** | | | | | | | |
| 11 | KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17) | | | | | | | | |
| | For Laying BC | Cum | | | | | | | |
| | 2nd cross Road | | 1 | 120.00 | 4.70 | 0.04 | 22.56 | | |
| | 3rd Cross road | | 1 | 135.00 | 4.40 | 0.04 | 23.76 | | |
| | | | | | | | **46.32** | 8118.54 | **376050.77** |
| | Basic rate | 7659.00 | | | | | | | |
| | Area Weightage 6% | 459.54 | | | | | | | |
| | Final Rate | **8118.54** | | | | | | | |

(10)

| Sl. No. | Description of work | Unit | No. | Length | Breadth | Depth | Quantity | Rate in Rs. | Amount in Rs. |
|---|---|---|---|---|---|---|---|---|---|
| | | | | m | m | m | | | |
| 12 | KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-17) | | | | | | | | |
| | Edge line | Sqm | 2 | 255.00 | 0.10 | -- | 51.00 | | |
| | | | | | | | **51.00** | 542.72 | **27678.72** |
| | Basic rate | 512.00 | | | | | | | |
| | Area Weightage 6% | 30.72 | | | | | | | |
| | Final Rate | **542.72** | | | | | | | |
| 13 | | | | | | | **Total Construction Cost** | | **2938569.579** |
| | | | | | | | **Cost towards PMC / Third Party inspection LS** | | **58772.00** |
| 14 | | | | | | | | **Sub Total** | **2997341.58** |
| | | | | | | | **Miscellaneous and rounding off** | | **2658.42** |
| | | | | | | | | **Total** | **3000000.00** |

**Certificate.**

1 The rates adopted based on the PWD SR, Bangalore circle for year 2016-17.
2 The provisions made in the estimate are necessary and essential.
3 The workspot was inspected and work is found to be necessary.
4 The area comes within the Bruhat Bangalore Mahanagara Palike limits.

Tejus Consultants

Assistant Engineer

Assistant Executive Engineer 16/5/2018

Executive Engineer 18/6/18